

## What We Claim is:

1. An immunogenic conjugate comprising group Y meningococcal polysaccharide covalently coupled to polymeric carrier, including O-deacetylated O-acetyl-positive group Y meningococcal polysaccharide or a fragment thereof, wherein the degree of de-O-acetylation is greater than 80%, for use as a vaccine against *N. meningitidis* infection.
2. An immunogenic conjugate of claim 1, characterized in the degree of de-O-acetylation is 100%.
3. A polysaccharide according to claim 1 with a Molecular weight average of one selected from the group consisting of 10 kDa, 50kDa and 150 kDa.
4. A polysaccharide according to claim 1 or claim 2 that has been fragmented and wherein the size of the fragment contains between 5 repeating units (ca 2.5 kDa) and 200 repeating units (ca 100 kDa).
5. A polysaccharide according to claim 1 or claim 2 that has been fragmented and wherein the size of the fragment contains between 20 repeating units (ca 10 kDa) and 40 repeating units (ca 20 kDa).
6. A conjugate product comprising a de-O-acetylated meningococcal Y polysaccharide conjugated to a carrier protein.
7. A conjugate product according to claim 4, wherein the carrier protein is a bacterial toxin or toxoid.
8. A conjugate product according to claim 5, wherein the bacteria toxin or toxoid is selected from the group consisting of diphtheria, tetanus, pseudomonas, staphylococcus, streptococcus, pertussis and *Escherichia coli* toxin or toxoid.
9. A conjugate product according to claim 6, wherein the bacterial toxin or toxoid is tetanus toxin or toxoid.

10. A conjugate product, wherein the modified meningococcal Y polysaccharide is as defined in claim 2.
11. A vaccine comprising a conjugate product as defined in claim 4.
12. A vaccine according to claim 9, wherein the bacterial toxin or toxoid is selected from the group consisting of diphtheria, tetanus, pseudomonas, staphylococcus, streptococcus, meningococcal porin B, pertussis and Escherichia coli toxin or toxoid.
13. A vaccine according to claim 10, wherein the bacterial toxin or toxoid is tetanus toxin or toxoid.
14. A vaccine according to claim 1, which comprises an adjuvant.
15. A vaccine according to claim 12, wherein the adjuvant is aluminum hydroxide.
16. A vaccine according to claim 9, which is adapted for administration by injection.
17. A vaccine according to claim 9, wherein the conjugated material comprises a polysaccharide as defined in claim 2.
18. The use of a modified polysaccharide as defined in claim 1 in the manufacture of a vaccine for use in meningitides against Group Y *Neisseria meningitides*.
19. The use of a conjugated material as defined in claim 4 in the manufacture of a vaccine for use in meningitides against Group Y *Neisseria meningitides*.
20. A process for the manufacture of a vaccine for use in immunisation against Group Y *Neisseria meningitides*, which process comprises providing a modified polysaccharide as defined in claim 1 and optionally mixing it with one or more of a pharmaceutically acceptable carrier medium, diluent or adjuvant.

21. A process for the manufacture of a vaccine for use in immunisation against Group Y *Neisseria meningitides*, which process comprises providing a conjugated material as defined in claim 4 and optionally mixing it with one or more of a pharmaceutically acceptable carrier medium, diluent or adjuvant.
22. The use of a vaccine as defined in claim 9 for meningitides against Group Y *Neisseria meningitides*.
23. A process for vaccinating a warm-blooded animal against Group Y *Neisseria meningitides*, which process comprises administering a vaccine as defined in claim 9 to the animal.
24. A process for the preparation of a modified meningococcal Y polysaccharide, which process comprises subjecting a meningococcal Y polysaccharide to base hydrolysis such that the meningococcal Y polysaccharide is at least in part de-O-acetylated.
25. A process for the preparation of a modified meningococcal Y polysaccharide, which process comprises subjecting a meningococcal Y polysaccharide to acid hydrolysis such that the meningococcal Y polysaccharide is fragmented.
26. A process for the preparation of a modified meningococcal Y polysaccharide fragment having a molecular weight of from 10 to 20 kDa, which process comprises:
- (a) providing an at least partially purified meningococcal Y polysaccharide;
  - (b) base hydrolysis of the polysaccharide;
  - (c) acid hydrolysis of the product of step (a); and optionally
  - (d) re-N-acetylating of the product of step (b).

27. A process for producing a conjugated product as defined in claim 4, which process comprises contacting a modified meningococcal Y polysaccharide with a carrier protein, optionally in the presence of a coupling agent.
28. A combination meningococcal conjugate vaccine including de-OAc forms of group Y, group C and group W135 meningococcal polysaccharides for prevention of meningococcal Y, C and W135 disease.